

CLAIMS

1. Device for separation and discharging plasma comprising

- a separation element which comprises a first and a second zone and
- the separation element is arranged in the device in such a manner that the first zone is accessible for blood application by the user,

wherein when blood is applied to the first zone of the separation element, plasma is passed into the second zone of the separation element and corpuscular blood components are essentially completely retained in the first zone of the separation element and

- a discharge unit which, after plasma separation, acts essentially on the second zone of the separation element without the discharge unit having an effect on the first zone of the separation element so that the separated plasma is released from the second zone of the separation element and is discharged through an outlet of the device.

2. Device as claimed in claim 1,
in which the separation element is a single-use article.

3. Device as claimed in claim 1,
in which the first zone of the separation element is arranged within the device laterally next to the second zone of the separation element in such a manner that the discharge unit acts on the second zone of the separation element essentially perpendicular to the plane in which the separation element is located.

4. Device as claimed in claim 1,
in which the second zone of the separation element is mounted in a movable holder within the device.
5. Device as claimed in claim 4,
in which the holder can be preferably rotated by 90° resulting in a detachment of the second zone of the separation element from the first zone.
6. Device as claimed in claim 1,
in which the second zone of the separation element is detached from the first zone of the separation element and the detachment and release of plasma from the second zone occur in two consecutive steps by actuating a trigger unit on the device.
7. Device as claimed in claim 1,
in which the first zone of the separation element contains a separation fleece and the second zone of the separation element contains a transport fleece.
8. Device as claimed in claim 1,
in which the second zone of the separation element is pressed out by a plunger.
9. Device as claimed in claim 1,
in which the separation element is strip-shaped.
10. System for detecting analytes in blood comprising :
 - a separation element which is arranged in a device in such a manner that a first zone of the separation element is accessible for blood application by the user

- wherein when blood is applied to the first zone of the separation element blood is passed into the second zone of the separation element and the remaining blood components are essentially completely retained in the first zone of the separation element and
 - a discharge unit which, after plasma separation, acts essentially on the second zone of the separation element without the discharge unit having an effect on the first zone of the separation element so that the separated plasma is released from the second zone of the separation element and is discharged through an outlet of the device.
 - and a test element enables detection of an analyte in plasma when the separated plasma is applied.
11. System as claimed in claim 10,
in which the structure of the test element is simplified in such a manner that there is no plasma separation by the test element itself.
12. Method for plasma separation and discharge comprising
- applying blood to a first zone of a separation element,
 - separating plasma from other blood components by means of the separation element, the blood components being essentially retained in the first zone of the separation element and the plasma being passed into a second zone of the separation element,
 - subsequent processing of the second zone of the separation element without affecting the first zone of the separation element such that plasma is released from the second zone of the separation element and

- discharge of the released plasma through an outlet.
13. Method as claimed in claim 12,
in which the second zone of the separation element is detached from the first zone of the separation element.
 14. Method as claimed in claim 12,
in which the separated plasma is eluted from the second zone of the separation element.
 15. Method as claimed in claim 12,
in which the separated plasma is released by means of pressure from the second zone of the separation element.
 16. Method as claimed in claim 12,
in which plasma is separated on the basis of a filtering process.
 17. Method as claimed in claim 16,
in which the filtering process is assisted by negative pressure.
 18. Method as claimed in claim 12,
which is used to determine high density lipoproteins.
 19. Method as claimed in claim 12,
in which the applied blood volume is preferably 30 μ l to 150 μ l.
 20. Method as claimed in claim 12,
in which plasma separation, release and discharge is carried out with a device as claimed in one of the claims 1-9.

21. Device as claimed in claim 1,
which is suitable for a method as claimed in one of the claims 12 – 19.